WHAT IS CLAIMED IS:

1. A spherical aberration correcting unit for correcting an aberration caused in an optical beam radiated toward an object to be detected and focused on the object, the unit comprising:

an aberration corrector composed of a plurality of optical members and configured to form the optical beam into a parallel pencil and to correct the aberration caused in the optical beam;

a driver configured to drive any one of the optical members in an optical axis direction of the optical beam;

a light receiver configured to receive light reflected from the object to produce a light-reception signal from the received light; and

a controller configured to control the driver based on the produced light-reception signal.

2. The spherical aberration correcting unit according to claim 1, wherein the object is an optical information recording medium.

3. The spherical aberration correcting unit according to claim 1, wherein a relationship of $0.2 < |f1/f| < 0.82$ is fulfilled, wherein a composite focal length of the aberration corrector is f and a focal length of the driven optical member is f1.

4. The spherical aberration correcting unit according to claim 1, wherein the aberration corrector is a collimator lens.

5. The spherical aberration correcting unit according to claim 2, wherein the any one of the optical members is composed of a plurality of lenses.

6. The spherical aberration correcting unit according to claim 2, wherein the collimator lens has an aspheric surface.

7.   The spherical aberration correcting unit according to claim 2, wherein a hologram is attached to the collimator lens.

8.   An optical pickup for reading and writing information from and
5   to an optical information medium by radiating an optical beam toward the optical information medium, the optical beam being focused on the optical information medium, the optical pickup comprising:

an spherical aberration correcting unit for correcting an aberration caused in the optical beam,
10   wherein the unit comprises:

an aberration corrector composed of a plurality of optical members   and configured to form the optical beam into a parallel pencil and to correct the aberration caused in the optical beam;

a driver configured to drive any one of the optical members in
15   an   optical axis direction of the optical beam;

a light receiver configured to receive light reflected from the medium to produce a light-reception signal from the received light; and

a controller configured to control the driver based on the
20   produced   light-reception signal.

9.   The optical pickup according to claim 8, wherein the object is an optical information recording medium.

25   10.   The optical pickup according to claim 8, wherein a relationship of 0.2<|f1/f|<0.82 is fulfilled, wherein a composite focal length of the aberration corrector is f and a focal length of the driven optical member is f1.

11.   The optical pickup according to claim 8, wherein the aberration
30   corrector is a collimator lens.

12.   A spherical aberration correcting method for correcting an

aberration caused in an optical beam radiated toward an object to be detected and focused on the object, the method comprising the steps of:

     forming the optical beam into a parallel pencil using a plurality of optical members, during which time, correcting the aberration caused in the

5   optical beam;

     driving any one of the optical members in an optical axis direction of the optical beam;

     receiving light reflected from the object to produce a light-reception signal from the received light; and

10   controlling the driver based on the produced light-reception signal.